



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,844	01/19/2007	Jerome Forissier	B-5946PCT 623418-6	6061
22879 7590 04/29/2010 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528				
EXAMINER BEYEN, ZEWDU A				
ART UNIT 2461		PAPER NUMBER		
NOTIFICATION DATE 04/29/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
laura.m.clark@hp.com

Office Action Summary

Application No.

10/577,844

Applicant(s)

FORISSIER ET AL.

Examiner

ZEWDU BEYEN

Art Unit

2461

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Amendment

- This action is responsive to amendment dated 02/02/2010.
- Applicant's amendments filed on 02/02/2010 has been entered and considered.
- Claims 1-14 are pending.
- Claims 1-14 stand rejected.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29

USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1 and 7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 15 of copending Application No. 10/557405.

Claim 1 of the instant application and claim 1 of copending application 10/557405 are substantially directed to the same subject matter; claim 1 of the instant application states that identifier determination and routing process are done at the load-balancer, but Claim 3 of copending application does not specify in what device the procedure are get execute . However, it would have been obvious to one ordinary skill in the art at the time the invention was made to add this feature to the invention defined by claim 1 of the instant application for the purpose of design choice.

Claim 7 of the instant application and claim 15 of copending application 10/557405 are substantially directed to the same subject matter; claim 7 of the instant application states that identifier determination and routing process are done at the load-

balancer, but Claim 15 of copending application does not specify in what device the procedure are get execute . However, it would have been obvious to one ordinary skill in the art at the time the invention was made to add this feature to the invention defined by claim 1 of the instant application for the purpose of design choice.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Comparison Table

Claim No	Instant application	Claim No	Pending Application No.10/557405 Publication No. 20070058533
1	A method of routing a message, conveyed in stream through a point-to-point connection to a load-balancing element, to one of a plurality of available processing systems each connected to the load-balancing element by separate point-to-point connections, comprising at the load-	1,2,3	1. A method of routing a message to one of a plurality of available processing systems, comprising the steps of: detecting the presence of a destination identifier in the message; and where the presence of the destination identifier is detected, forwarding the message to the

<p>balancing element: extracting the message from the stream; detecting in the extracted message the presence of a <u>destination identifier</u> identifying one of the available processing systems; and where the presence of the destination identifier is detected, Forwarding the message to the processing system identified thereby via the appropriate connection; otherwise <u>detecting in the extracted message a message identifier for identifying related messages searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which one of the available processing systems each such message having no destination identifier was forwarded</u> determining a destination processing system</p>	<p>processing system identified thereby; and where the presence of the destination field is not detected: determining a destination processing system for processing the message; inserting into the message a destination identifier identifying the determined destination processing system; and forwarding the message to the determined processing system.</p> <p>2. A method according to claim 1, wherein each message further includes a message identifier for identifying related messages, the method further comprising maintaining a database of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems</p>
---	---

	for processing the message; inserting into the message an identifier identifying the determined destination processing system; and forwarding the message to the processing system via the appropriate connection.		each message was forwarded to. 3. The method according to claim 2, further comprising, where a message is received without a destination identifier, searching the database for a related message identifier and, where found, forwarding the message to the processing system identified therein.
7	A load-balancing element for routing a message conveyed in a stream through a point-to-point connection to one of a plurality of available processing systems each connected to the load- balancing element by separate point-to-point connections, comprising at the load-balancing element: a message processor for extracting the message from the stream; a	12,14,15	12. A load-balancing system for routing a message to one of a plurality of available processing systems, comprising: a message analyzer for detecting the presence of a destination identifier in the received message; and a message forwarder for forwarding the message to the processing system identified by the detected identifier. 14. A load-balancing system

<p>message analyzer for detecting in the received message the presence of a destination identifier identifying one of the available processing systems and the presence of a message identifier for identifying related messages; a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each such message having no destination identifier was forwarded; and a message forwarder for forwarding the message, via the appropriate connection, to the processing system identified connection by the destination identifier if the presence of a destination</p>		<p>according to claim 12, wherein each message further includes a message identifier for identifying related messages, and further comprising a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each message was forwarded to.</p> <p>15. A load-balancing system according to claim 14, further comprising, where a message is received without a destination identifier, means for searching the database for a related message identifier and for identifying to which processing system the message should be forwarded.</p>
---	--	--

	identifier is detected, and to a processing system to which a related message was forwarded if the presence of a destination identifier is not detected and the message identifier is contained in the database.		
--	--	--	--

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4, and 7-10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuomo to **(US7366755)** in view of Au to **(US-PGPUB -20020174034)**

Regarding claims 1, and 7 Cuomo teaches extracting the message from the stream of a plurality of available processing systems (col. 5 lines 52-63 teaches routing a request to one of a plurality of application servers)

detecting in the extracted message the presence of an identifier identifying one of the available processing systems **(col. 7 lines 4-12 teaches a web server determining if the request message includes a session ID, col. 2 lines 4-9 teaches the session ID identifies a destination application server);**

if the presence of the identifier is detected, forwarding the message to the processing system identified thereby via the appropriate connection **(col. 7 lines 28-30 teaches forwarding the request to the identified destination application server)**

if the destination identifier is not present in the message, determining a destination processing system and inserting the identification into the message then forwarding the message to the determined processing system destination processing system for processing the message (col. 7 lines 4-12 teaches if the request message does not includes a session ID ; selects a destination application server and forwards the request);

Cuomo does not explicitly teach detecting in the extracted message a message identifier for identifying related messages; searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which one of the available processing systems each such message having no destination identifier was forwarded

However, Au teaches detecting in the extracted message a message identifier for identifying related messages; searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which one of the available processing systems each such message having no destination identifier was forwarded; ([0071] discloses The process begins by receiving a customer request (step 1000). The request is routed to the primary or secondary WCS server using a load distribution mechanism (step 1002) with the process terminating thereafter. This load distribution mechanism may take many forms as described above. In a preferred embodiment, a new user request, indicated by a source IP address and destination port different from one recorded by the load balancer, is routed to the least utilized primary or secondary server; and the load balancer records in a table the routing of the request from that source IP

address and destination port (typically port 80) to the selected server. Subsequently, if another request is received from the same source IP address to the same destination port within a "stickiness" interval (e.g. 1 hour stickiness period), the load balancer detects this situation using the entry in the table and routes the client request to the same server that was previously selected for this source IP address and destination port).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo detecting in the extracted message a message identifier for identifying related messages; searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which one of the available processing systems each such message having no destination identifier was forwarded, as suggested by Au. This modification would benefit the system to transmit or send received message or data by relating the same network transaction to a proper processing destination

Regarding claim 2, Cuomo does not explicitly teach comprising maintaining the database of message identifiers for which no destination identifiers [[was]]were detected along with the information indicating to which of the available processing systems such messages having no destination identifier were forwarded

However ,Au teaches method according to claim 1, the method further comprising maintaining the database of message identifiers for which no destination identifiers [[was]]were detected along with the information indicating to which of the available processing systems such messages having no destination identifier were forwarded ([0071] discloses a new user request,

indicated by a source IP address and destination port different from one recorded by the load balancer, is routed to the least utilized primary or secondary server; and the load balancer records in a table the routing of the request from that source IP address and destination port (typically port 80) to the selected server. Subsequently, if another request is received from the same source IP address to the same destination port within a "stickiness" interval (e.g. 1 hour stickiness period), the load balancer detects this situation using the entry in the table and routes the client request to the same server that was previously selected for this source IP address and destination port).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo maintaining the database of message identifiers for which no destination identifiers were detected along with the information indicating to which of the available processing systems such messages having no destination identifier were forwarded, as suggested by Au. This modification would benefit the system of Cuomo to transmit or send received message or data by relating the same network transaction to a proper processing destination.

Regarding claim 3, Cuomo does not explicitly teach determining a destination processing system for processing the message, if the presence of a destination identifier is not detected, comprises determining the destination processing system to be the available processing system to which a related message was sent if the detected message identifier is found in the database

However, Au teaches determining a destination processing system for processing the message, if the presence of a destination identifier is not detected, comprises determining the destination processing system to be the available processing system to which a related message was sent if the detected message identifier is found in the database([0071] discloses **The process begins by receiving a customer request (step 1000). The request is routed to the primary or secondary WCS server using a load distribution mechanism (step 1002) with the process terminating thereafter. This load distribution mechanism may take many forms as described above. In a preferred embodiment, a new user request, indicated by a source IP address and destination port different from one recorded by the load balancer, is routed to the least utilized primary or secondary server; and the load balancer records in a table the routing of the request from that source IP address and destination port (typically port 80) to the selected server. Subsequently, if another request is received from the same source IP address to the same destination port within a "stickiness" interval (e.g. 1 hour stickiness period), the load balancer detects this situation using the entry in the table and routes the client request to the same server that was previously selected for this source IP address and destination port), and determining the destination processing system by a load analyzer if the detected message identifier is not found in the database ([0071] discloses **If no subsequent request is received from the same source IP address and destination port for the stickiness interval, the load balancer deletes the recorded routing information and a subsequent request from the same source IP address and destination port after the stickiness interval is routed to the then least utilized primary or secondary server. Those of ordinary skill in the art will readily appreciate that other methods for routing requests can be used by the load****

balancer. For example, the load balancer can be content aware and route a client request based on a cookie in the user request).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo determining a destination processing system for processing the message, if the presence of a destination identifier is not detected, comprises determining the destination processing system to be the available processing system to which a related message was sent if the detected message identifier is found in the database, as suggested by Au. This modification would benefit the system of Cuomo to transmit or send received message or data by relating the same network transaction to a proper processing destination.

Regarding claim 4, Cuomo does not explicitly teach removing entries in the database after a predetermined amount of time

However, Au teaches removing entries in the database after a predetermined amount of time ([0071] discloses "stickiness" interval (e.g. 1 hour stickiness period). Thus, if there is no message detected coming from the entry party with in the "stickiness" interval the entry will be deleted from the record).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo removing entries in the database after a predetermined amount of time, as suggested by Au. This modification would benefit the system of Cuomo to efficiently manage storage space.

Regarding claim 8, Cuomo does not explicitly teach when the presence of a destination

identifier is not detected, a message processor for inserting into the message a destination identifier identifying processing system to which the message is to be forwarded for processing

However, Au teaches when the presence of a destination identifier is not detected, a message processor for inserting into the message a destination identifier identifying processing system to which the message is to be forwarded for processing([0071] **discloses The process begins by receiving a customer request (step 1000). The request is routed to the primary or secondary WCS server using a load distribution mechanism (step 1002) with the process terminating thereafter. This load distribution mechanism may take many forms as described above. In a preferred embodiment, a new user request, indicated by a source IP address and destination port different from one recorded by the load balancer, is routed to the least utilized primary or secondary server; and the load balancer records in a table the routing of the request from that source IP address and destination port (typically port 80) to the selected server. Subsequently, if another request is received from the same source IP address to the same destination port within a "stickiness" interval (e.g. 1 hour stickiness period), the load balancer detects this situation using the entry in the table and routes the client request to the same server that was previously selected for this source IP address and destination port).**

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo when the presence of a destination identifier is not detected, a message processor for inserting into the message a destination identifier identifying processing system to which the message is to be forwarded for processing, as suggested by Au. This modification would benefit the system of Cuomo to transmit or send

received message or data by relating the same network transaction to a proper processing destination.

Regarding claim 9, Cuomo does not explicitly teach when the presence of a destination identifier is not detected and the message identifier is not contained in the database, a load analyzer for determining a destination processing system to which the message forwarder should forward the message for processing

However, Au teaches when the presence of a destination identifier is not detected and the message identifier is not contained in the database, a load analyzer for determining a destination processing system to which the message forwarder should forward the message for processing **([0071] discloses If no subsequent request is received from the same source IP address and destination port for the stickiness interval, the load balancer deletes the recorded routing information and a subsequent request from the same source IP address and destination port after the stickiness interval is routed to the then least utilized primary or secondary server. Those of ordinary skill in the art will readily appreciate that other methods for routing requests can be used by the load balancer. For example, the load balancer can be content aware and route a client request based on a cookie in the user request).**

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo when the presence of a destination identifier is not detected and the message identifier is not contained in the database, a load analyzer for determining a destination processing system to which the message forwarder should forward the message for processing, as suggested by Au. This modification would benefit the system of

Cuomo to transmit or send received message or data by relating the same network transaction to a proper processing destination.

Regarding claim 10, Cuomo does not explicitly teach where a message is received without a destination identifier, means for searching the database for a related message identifier and for identifying to which processing system the message should be forwarded

However, Au teaches where a message is received without a destination identifier, means for searching the database for a related message identifier and for identifying to which processing system the message should be forwarded **discloses a new user request, indicated by a source IP address and destination port different from one recorded by the load balancer, is routed to the least utilized primary or secondary server; and the load balancer records in a table the routing of the request from that source IP address and destination port (typically port 80) to the selected server. Subsequently, if another request is received from the same source IP address to the same destination port within a "stickiness" interval (e.g. 1 hour stickiness period), the load balancer detects this situation using the entry in the table and routes the client request to the same server that was previously selected for this source IP address and destination port).**

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo where a message is received without a destination identifier, means for searching the database for a related message identifier and for identifying to which processing system the message should be forwarded, as suggested by Au. This modification would benefit the system of Cuomo to transmit or send received message or

data by relating the same network transaction to a proper processing destination.

4. Claims 11, 5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuomo to (US7366755) in view of Au to (US-PGPUB -20020174034) further in view of Olson et al. to (US-PGPUB-2004/0205192).

Regarding claims 11, and 5 Cuomo does not teach a transport control protocol (TCP) connection, and the received message is a session initiation protocol (SIP) message.

However, Olson teaches a transport control protocol (TCP) connection (see, [0029], line 21), and the received message is a session initiation protocol (SIP) message (see, [0019]).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to include a transport control protocol (TCP) connection, and the received message is a session initiation protocol (SIP) message in the system of Cuomo, as suggested by Olson. This modification would benefit the system of Cuomo to acquire a method and a system that uses SIP protocol to enable call setup initiation, routing, authentication and other feature messages to endpoints within an IP.

Regarding claim 13, Cuomo does not teach a session initiation protocol (SIP) network comprising elements according to claim 7.

However, Olson teaches a load-balancing method and system that are implemented in a session initiation protocol (SIP) network (see, fig. 2, and [0027] - [0030])

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to implement a session initiation protocol (SIP) network in the system of Cuomo, as suggested by Olson. This modification would benefit the system of Cuomo to acquire a method and a system that use SIP protocol to enable call setup initiation, routing, authentication and other feature messages to endpoints within an IP.

5. Claims 6 and 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuomo to (US7366755) in view of Au to (US-PGPUB -20020174034) and further in view of Gilleland to (US-PGPUB-2002/0073203).

Regarding claims 6 and 12, Cuomo does not teach the message processor is adapted for inserting the destination identifier into an extension header of a SIP message.

However, Gilleland teaches inserting the destination identifier into an extension header of a SIP message ([0033] discloses SIP server adding the calling party information to a SIP request message)

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to enable the system of Cuomo inserting the destination identifier into an extension header of a SIP message, as suggested by Gilleland. This modification would benefit the system of Cuomo to reliably and effectively communicate the message with the endpoint or destination that the message is intended to.

6. Claim 14, is rejected under 35 U.S.C. 103(a) as being unpatentable over Cuomo to (US7366755) in view of Au to (US-PGPUB -20020174034) and further in view of Olson et al. to (US-PGPUB-2004/0205192).

Regarding claim 14, Cuomo does not teach a session initiation protocol (SIP) network operating in accordance with the method of claim 1

However, Olson teaches a load-balancing method and system that are implemented in a session initiation protocol (SIP) network (see, fig. 2, and [0027] - [0030]).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to implement a session initiation protocol (SIP) network in the system of Cuomo, as suggested by Olson. This modification would benefit the system of

Cuomo to acquire a method and a system that uses SIP protocol to enable call setup initiation, routing, authentication and other feature messages to endpoints within an IP.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 1-571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B./

Examiner, Art Unit 2461

Application/Control Number: 10/577,844

Page 22

Art Unit: 2461

/Huy D Vu/

Supervisory Patent Examiner, Art Unit 2461